

**MIDDLE ATLANTIC
Region 1
HHS-N-276-2011-00003-C
iPads and Clinical Staff: Using Mobile Devices to Access
Evidence-Based Knowledge
Benedictine Hospital (HealthAlliance)
Medical Library
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Table of Contents

Executive Summary.....	3
Approaches and Interventions Used.....	4
Evaluation Activities.....	5
Problems or Barriers Encountered.....	6
Continuation Plans.....	7
Impact.....	8
Lessons Learned.....	9
Other.....	10
Attachment 1 – AR summary data: Subcontractor activities.....	11

Executive Summary

Our primary goal with this project was to demonstrate to the clinical staff at the three HealthAlliance hospitals the availability of evidence-based resources on mobile devices, with a special focus on the resources already on our library web pages. Our primary target population was the HealthAlliance nurses since they had expressed a need for education in the area of information that is available using new technologies. Also, nursing instructors from the local community college have just begun using mobile devices as they do clinical rotations in our hospitals, and we wished to be able to provide the same technology in our libraries. Our secondary target population was all the other clinical staff at our hospitals, including the medical staff. The project enabled us to initiate conversations about our electronic resources and how they can be accessed via mobile devices. The project definitely raised the awareness among our staff about the electronic resources we have available and the services provided by the librarians. Having the iPads in our libraries enhanced our image as being able to provide cutting-edge evidence-based information.

Minority Populations Served

African Americans: No
American Indians/Alaska Natives: No
Asian Americans: No
Hispanics/Latinos: No
Native Hawaiians and Pacific Islanders: No
Other: No

Approaches and Interventions Used

Our goal for the project period was to demonstrate to as many of our staff as possible the use of iPads for retrieving evidence-based information, especially that available on our library web pages. Specifically we aimed that each of the two librarians would do a total of 50 iPad demonstrations and loan out the iPad to clinicians a total of 9 times. We hoped that the project would increase the visibility of the librarians as purveyors of current technologies.

Mary Evans, as Project Manager, was responsible for: the award application, the interim report, and the final report; completion of the contract with the University of Pittsburgh and reimbursement for project expenditures; purchase of the five iPads and delivery of two of them to Kingston Hospital and one to Margaretville Hospital; and drafting the policy for loan of the iPads to staff, grids for tracking demonstrations and loans, and fliers describing mobile access to StatRef, Access Medicine, and NLM mobile web sites. To promote this project she: prepared an article featuring the libraries as the Service of the Week in the HealthAlliance weekly e-mail update; submitted an article for the April, 2012, issue of Happenings, the HealthAlliance newsletter; inserted a feature article about the iPad project on Benedictine Hospital's web page; twice sat in the cafeteria with a sign and the iPads; sent a mass e-mail to clinical management at HealthAlliance regarding the project; attended a physician open house in the community and handed out fliers there; put fliers in all physician boxes at Benedictine; and made presentations to four nursing council meetings and one in-house class. She was responsible for loans and demonstrations of the iPads at the Benedictine Hospital campus. The Medical Librarian at Kingston Hospital consulted on the award application, fliers and grids, and the publicity articles and distributed fliers to physicians on the Kingston Hospital campus. She was responsible for loans and demonstrations of the iPads at the Kingston Hospital campus. The Director of Nursing at Margaretville Hospital had responsibility for the iPad project on her small campus. After an initial demonstration by Mary Evans, the Director of Nursing oversaw the demonstration and usage of the iPads at the Margaretville campus.

Evaluation Activities

The primary method of assessment was the number of demonstrations we did and the total number of people in attendance at those demonstrations. At the Benedictine campus, there were 27 demonstrations with a total of 134 staff in attendance. At Kingston Hospital there were 11 demonstrations with a total of 11 in attendance. At Margaretville, there were 9 demonstrations with a total of 15 in attendance. Totaling the three sites, we had a grand total of 47 demonstrations for 160 staff. While this is fewer demonstrations than we had aspired to in our original application, we feel that our goal of reaching a wide number of our staff was reached, and we feel our publicity will continue to attract staff who wish to see or borrow our iPads. Loans of the iPads totaled 3 at Benedictine, 1 at Kingston, and 4 at Margaretville, for a total of 8. Inherent in this project was the goal of increasing the proficiency of the librarians and the Director of Nursing at Margaretville in using an iPad for accessing evidence-based medicine. This goal has been resoundingly accomplished. Project Manager Mary Evans even learned how to generate QR codes for use on the fliers, and QR codes seemed to be one feature that impressed many of our staff. There was definitely more publicity regarding the libraries during the project period than normal, and this has necessarily brought the library to the attention of more of our staff.

Statistical data for usage of our web pages was evaluated during the project period. Margaretville's web site is new so there was no comparative data for 2011. The data for Benedictine for February and March for both 2011 and 2012 were compared. Usage of both StatRef and Access Medicine, the two features of our web page that were most emphasized during the demonstrations, were both increased in 2012. This is encouraging but is not conclusive that the iPad demonstrations were the cause. Demonstrations commenced later at Kingston so data for March only for 2011 and 2012 were compared; both StatRef and Access Medicine showed a decrease in usage in 2012.

Individual Assessment forms were collected from a total of 37 people who attended demonstrations. An interesting result was that 43% of the respondents currently own a smart phone or mobile tablet. Even more interesting was the fact that 50% of the respondents did not realize that a mobile device could be used to access full-text clinical books! This shows that continued education in this area is warranted and needed.

Problems or Barriers Encountered

The first problem encountered was the time it took to obtain the executed contract which was required by the HealthAlliance Finance Department before the iPads could be purchased. There was a period of six weeks between the notification of the grant and the ordering of the iPads, a significantly long period given the short project period. This delay was used as a time to draft the loan policy and fliers. As soon as the iPads arrived, the second problem occurred. We had ordered Smart Covers for the devices, but feedback from our nursing staff pointed out that these covers did not provide any protection against breakage should the iPads be dropped. So, the five Smart Covers were returned for a full refund to Apple, and protective cases and screen protectors were ordered from Otter Box. This caused another three week delay in the roll-out of the project. The third unexpected event occurred when the status of the librarian at Kingston Hospital was changed from full-time to half-time during the project period, thus reducing the time she had available to promote and demonstrate the iPads.

Continuation Plans

Demonstrations and loans of the iPads will continue at all three sites. Managers and other staff providing education will be contacted individually and offered a demonstration for them or their departments. Additional fliers will be distributed to our medical staffs. There are plans to collect from current iPad users their favorite apps and make the list available to staff. Statistical data will continue to be monitored. Periodic reminders will be made via e-mail, fliers, and newsletters. We will continue to observe how the iPads are being used when they are loaned out so this information will guide our future forays into mobile technologies.

Impact

This project provided our libraries with another avenue to provide evidence-based information to the staff at the HealthAlliance hospitals. It gave us an opportunity to promote our web-based resources. It increased the visibility of the librarians and the medical libraries. It enabled the librarians to increase their knowledge of and ability to use an iPad to the level of being able to instruct others in its use. It improved the image of the librarians as being technologically up-to-date.

We were especially pleased in the varied ways the iPads were used when they were loaned out. Our diabetes educator used it for patient education at the bedside. A YouTube video was used to reinforce safety in the MRI suite. An app showing the anatomy of the brain was used in a class for new ICU nurses.

Our local state-funded consortium has a hospital library services program, and several of the hospital librarians in this group have recently acquired iPads. We have already discussed our use of them informally, and an iPad user group may be formed in the near future.

Lessons Learned

Staff embraced the availability of the iPads with less eagerness than expected in spite of numerous announcements. It had been thought that many people would rush to use the iPads to explore how they work. One obstacle that certainly came into play was the busy schedules of our hospital staff. It had also been expected that opportunities to demonstrate the iPads would just happen naturally, but, in fact, they had to be done with more intentionality and planning.

This project provided a wonderful opportunity for us to promote use of the web page of electronic resources that we already had. We continually find staff who are unaware of this service and the valuable resources there.

Input from our nursing staff emphasized the importance of having break-resistant cases for the iPads. Staff would be reluctant to borrow one and be responsible for it if no protective case was present.

Other

N/A

Attachment 1: AR summary data: Subcontractor activities